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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/501,903

03/01/2005

Martin Vorbach

2885/87

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26646

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03/18/2008

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EXAMINER

CHAUHAN, LOREN B

ART UNIT

PAPER NUMBER

2193

MAIL DATE

DELIVERY MODE

03/18/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/501,903	Applicant(s) VORBACH ET AL.	
	Examiner LOREN CHAUHAN	Art Unit 2193	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 March 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 2 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 2 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|----------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>7/16/2004</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-2 are pending for examination.

Claim Objections

2. Claims 1 and 2 are objected to because of the following informalities:

Examiner notes the use of "ALUS" acronyms in above claims. Use of acronyms in claim language should be explained in plain text.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-2 are rejected under 35 U.S.C. 102(b) as being anticipated by Automatic Allocation of Arrays to Memories in FPGA Processors With Multiple Memory Banks by Gokhale et. al. (Field-Programmable Custom Computing Machines, IEEE Proceedings April 1999 hereinafter Gokhale).

5. As per claims 1 and 2, Gokhale teaches the invention as claimed including a method for partitioning large computer programs and or algorithms at least part of which is to be executed by an array of reconfigurable units (Abstract 1st paragraph and Title) such as ALUS, comprising the steps of

defining a maximum allowable size to be mapped onto the array (section 3, paragraph 4, 1st bullet; e.g. put a 16-bit value in a 16 or 32-bit memory),

partitioning the program (section 5.1, 2nd paragraph; e.g. we annotate the program with #pragma Partition %pma %fip inimg outimg \ occ total) such that its separate parts minimize the overall execution time (Abstract 2nd paragraph; e.g. NAPA C compiler to assign data automatically to memories to produce minimum overall execution time) and providing a mapping onto the array not exceeding the maximum allowable size (section 5.1, 3rd paragraph lines 1-4; section 3, 1st paragraph lines 3-6; e.g. this (i.e. section 5.1, 2nd paragraph; e.g. we annotate the program with #pragma Partition %pma %fip inimg outimg \ occ total) tells the allocator to map four variables onto the available memories of two 32-bit SRAM memory of type of “pma” and one 32-bit DRAM memory of type “fip” of NAPA 1000 chip).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to LOREN CHAUHAN whose telephone number is 571-270-1554. The examiner can normally be reached on Mon.-Thr. 9:30-5:00 (EST).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lewis Bullock can be reached on 571-272-3759. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Lewis A. Bullock, Jr./
Supervisory Patent Examiner, Art Unit 2193

Loren Chauhan
Examiner
Art Unit 2193

/L. C. /
Examiner, Art Unit 2193